

Journal of the Board of Directors

ANNUAL REPORT

OF THE

BOARD OF DIRECTORS

OF THE

Lehigh Valley Rail Road Co.

TO THE

STOCKHOLDERS,

JANUARY 11, 1869.

PHILADELPHIA:

EDWARD N. GRATTAN, PRINTER.

No. 227 CHESTNUT STREET.

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OFFICERS
OF THE
LEHIGH VALLEY RAILROAD COMPANY.

JANUARY 11, 1869.

President.

ASA PACKER.

Vice-President.

CHARLES HARTSHORNE.

Treasurer.

CHARLES C. LONGSTRETH.

Secretary.

LLOYD CHAMBERLAIN.

Gen. Superintendent and Chief Engineer.

ROBERT H. SAYRE.

Directors.

CHARLES HARTSHORNE,
WILLIAM W. LONGSTRETH,
EDWARD H. TROTTER,
JOHN TAYLOR JOHNSTON,
WILLIAM H. GATZMER,
DAVID THOMAS,

ASHBEL WELCH,
JOHN N. HUTCHINSON,
WILLIAM L. CONYNGHAM,
ARIO PARDEE,
EDWARD ROBERTS,
WILLIAM A. INGHAM.

ANNUAL REPORT.

DURING the past year, the coal tonnage over our road has shown a larger increase than usual, the growth of business and new arrangements to secure trade to our line having more than counterbalanced the effect of the opening of a new outlet to market competing with us for the same traffic.

The total number of tons moved was 2,603,103 against 2,080,157 in 1867, making an increase of 522,946 tons, or 25.14 per cent., of which amount 204,026 tons was delivered to the canal for shipment in excess of that given them the previous year, leaving 318,920 tons as the net increase carried over our road.

The total amount carried on the line below Mauch Chunk was 2,225,630 tons.

The distribution of this trade and other details will be shown more fully in the annexed report of the Superintendent and Engineer.

The charges for carrying coal, although reduced during the summer, have been advanced and are now quite up to the average of former years.

It having been considered important for the welfare of both Companies that injurious competition should be avoided, arrangements were entered into with the Lehigh Coal and Navigation Company, owning the Lehigh and Susquehanna Railroad, by which the same rates for common points have been adopted by each Company.

The receipts from transportation of coal have

increased over those for the previous year .	\$572,607 22
And those from passengers and mails and miscellaneous freights	56,906 40
Making a total increase of receipts of . . .	<u>\$629,513 62</u>

The receipts from all sources for the year were	\$4,465,401	90
Expenses of conducting the business	2,501,293	69
Net earnings	\$1,964,108	21

Out of which the usual quarterly dividends of $2\frac{1}{2}$ per cent. each, amounting to 10 per cent. in all, were paid.

The above includes the receipts and expenses of the Hazleton Division for the last six months—the merger not having gone into effect until June 1st.

Work has been continued upon the railroad of the Pennsylvania and New York Canal and Railroad Company, and thirty-three miles between Wilkesbarre and Tunkhannock have been brought into use during the past year. The completion of a bridge at the latter place will soon enable us to use several additional miles of track already down, and most of the heavy work is done on the whole fifty-two miles from Tunkhannock to Towanda, from which point this line has been in successful operation to the Erie Railway, at Waverly, a distance of twenty miles, for about one year. The local traffic on the portions opened has exceeded our anticipations, and the Board see no reasons to change their views of the great importance this road will be to us when completed, which, we hope, will be early in the ensuing summer.

We have received from that Company, since the date of the last report, \$1,020,000 in their 7 per cent. bonds, in payment for work done, making in all \$2,697,000 received up to the end of our fiscal year.

The subject of securing the control of tonnage for our road from regions having other outlets to market has claimed the earnest attention of the Board—they having estimated it as of the utmost importance to the future welfare of the Company. After full consideration, it was concluded to make arrangements to insure a traffic for each of our branches in addition to that to be expected from other sources.

The Hazleton coal field has for many years furnished a very large proportion, sometimes from forty to fifty per cent., of the total quantity of coal transported over our road, besides a large amount forwarded by other lines. Negotiations were entered into and consummated with the assent

of the stockholders, at meetings called for the purpose, through which, by the merger of the Hazleton Railroad Company and the Lehigh Luzerne Railroad Company, the whole of this trade was secured to us, and the valuable coal lands and other real estate of the Hazleton Company became the property of this Company.

The experience and results of the working for the six months which have elapsed since the consolidation went into effect, have fully justified the expectations of the Board, whilst the withdrawal from competition of so large a business has greatly strengthened the future prospect of our road. In pursuance of the same policy, the Board have acquired, through the purchase of stock in coal companies, &c., a controlling interest in large tracts on the Wyoming and Mahanoy branches, sufficient of themselves, when properly developed, to furnish us with a coal tonnage equal to that now moved by us from those regions.

As stated in our last Annual Report, there had been expended, on the extension from White Haven to Wilkesbarre, over \$500,000 more than the amount received from the issue of stock for that purpose. It was also estimated that \$1,500,000 more would be required during the past year to complete the railroad along the North Branch of the Susquehanna River to the Erie Railway at Waverly, in New York. To meet these expenditures, and for the purpose of providing means to increase our facilities for doing business, and also to enable us to withdraw, by conversion, or payment at maturity, the outstanding bonds of the Company due in 1873, the Board directed the execution of a mortgage on the road and branches for the sum of \$5,000,000, to secure the payment of 5000 bonds for \$1000 each, to be either coupon or registered, and to bear interest at the rate of six per cent., free from State or United States taxes.

Of these bonds, a sufficient number have been set aside for the conversion or payment of the old bonds, and also of the outstanding bonds of the Hazleton Railroad Company, and the balance are applicable to the general purposes of the Company.

At the end of our fiscal year (Nov. 30), our	
capital stock consisted of 321,163 shares .	\$16,058,150 00
Old bonds outstanding	1,262,000 00
Hazleton Railroad Company bonds . . .	149,500 00
New bonds	1,917,000 00
Floating debt	963,620 85
Total	<u>\$20,350,270 85</u>

The amount of the bonds of the Pennsylvania and New York Canal and Railroad Company, owned by us, including some yet to be received in settlement for work done, is \$2,440,000.

Since November 30th, we have received \$28,000 of our old bonds, and \$8500 of the bonds of the Hazleton Railroad Company, in exchange for our new bonds.

Early in the year, Mr. William W. Longstreth, finding his health somewhat impaired, tendered his resignation of the office of President, which was accepted with regret. The Company have continued to have the benefit of his valuable services as a member of the Board. The Vice-President, Asa Packer, was elected President, and Charles Hartshorne, Vice-President.

The increase of business consequent upon the merger of two other companies of large capital into our own, required the separation of the offices of Secretary and Treasurer. Mr. L. Chamberlain, who had for many years filled them both, retained that of Secretary, in connection with the office of Purchasing Agent, and Mr. C. C. Longstreth was elected Treasurer.

We recommend to the stockholders to accept the provisions of an act entitled "An Act relating to railroad companies and common carriers, defining their liabilities, and authorizing them to provide means of indemnity against loss of life and personal injury," approved April 4th, 1868.

By order of the Board,

ASA PACKER,
President.

January 11, 1869.

OFFICE OF THE SUP'T AND ENGR L. V. R. R. Co.,
BETHLEHEM, PA., Nov. 30th, 1868.

HON. ASA PACKER, Pres.,

DEAR SIR:—The following report of the business of the Lehigh Valley Railroad for the fiscal year ending November 30th, 1868, is respectfully submitted:—

The total amount of coal transported over the main line and branches, was 2,603,102 $\frac{1}{2}$ tons.

This was derived from the following sources:—

FROM	1867.	1868.	Increase & decrease.
Wyoming Region	274,334	288,137	13,803
Hazleton Region	271,323	1,252,638	531,315
Upper Lehigh Region	53,985	38,307	*15,678
Beaver Meadow Region	577,678	554,270	*23,408
Mahanoy Region	452,837	469,751	16,914
Total	2,080,157	2,603,103	522,946

And was delivered as follows:—

	1867.	1868.	Increase & decrease.
At P. H. J. to L. & S. R. R. for canal .	89	202,482	202,393
“ “ “ “ “ rail . . . . .	.....	25,928	25,928
“ Mauch Chunk for canal	114,526	116,161	1,635
Above Mauch Chunk for use of L. V. R. R. Co.	16,716	29,933	15,318
On line of road above Mauch Chunk .	440	2,101	428
At Mauch Chunk	677,830	651,427	*26,403
On line of road below Mauch Chunk .	7,130	7,460	330
To Cata. and Foglesville R. R. . . .	6,442	12,205	5,763
“ East Penn. R. R.	140,827	173,625	32,798
“ North Penn. R. R.	105,330	101,555	*3,775
“ Morris Canal	514,945	746,491	231,546
“ Central R. R. of N. J.	278,458	267,651	*10,807
“ Bel. Delaware R. R.	217,424	265,216	47,792
Total by canal	114,616	318,642	204,026
Total by rail	1,965,541	2,284,461	318,920
Grand total	2,080,157	2,603,103	522,946

* Decrease.

TONS CARRIED ONE MILE.

	1867.	1868.	Increase & decrease.
Above Mauch Chunk—			
From Wyoming Region	9,724,800	14,866,017	5,141,217
“ Hazleton Region	5,889,974	20,450,956	14,560,982
“ Upper Lehigh Region	391,391	.....	*391,391
“ Beaver Meadow Region	12,903,311	12,365,198	*538,113
“ Mahanoy Region	16,740,903	17,618,252	877,349
Total above Mauch Chunk	45,650,379	65,300,423	19,650,044
Total below Mauch Chunk	75,541,467	88,595,282	13,053,815
Grand Total	121,191,846	153,895,705	32,703,859

During the same period, there were transported 688,458½ passengers, equal to 11,132,673 carried one mile; being an increase over the previous year of 45,333½, equal to 119,200 carried one mile.

Miscellaneous freight transported amounted to 1,146,216 $\frac{5}{100}$ tons, equal to 28,412,376 $\frac{2}{100}$ tons one mile; being an increase over the previous year of 89,774 $\frac{5}{100}$ tons, equal to 4,994,042 $\frac{2}{100}$ tons one mile; made up principally of lumber, live stock, Empire line and merchandise freight.

Compared with last year, the receipts from coal show an increase of \$572,607.22 or 22 $\frac{5}{100}$ per cent.; from freight, an increase of \$74,103 $\frac{8}{100}$ or 10 $\frac{5}{100}$ per cent.; from passengers, a decrease of \$17,197.42 or 4 $\frac{2}{100}$ per cent.; total increase of receipts, \$629,513.62 or 17 $\frac{2}{100}$ per cent.

The following is a statement of receipts from all sources and the ordinary running expenses:—

	Gross receipts.	Expenses.	Net receipts.
Coal	\$3,108,296 49	\$1,825,836 50	\$1,282,459 99
Freight	774,466 35	404,571 85	369,894 50
Pass. express and mail .	387,886 86	270,885 34	117,001 52
	\$4,270,649 70	\$2,501,293 69	\$1,769,356 01

The coal tonnage and receipts therefrom show a steady increase, and must continue to do so, if facilities are provided for its movement and for its shipment at tide-water.

* Decrease. *

There is also a gratifying increase in the tonnage and receipts from the transportation of miscellaneous freight.

In passengers, the number carried exceeded that of any previous year, although the receipts were \$17,197.42 less than last year; this is accounted for in part by the large number of excursionists carried at low rates during the political campaign and by the increased number using mileage tickets.

The low rate of charges upon coal which prevailed until the middle of August, and the increased mileage on the laterals, where the least remunerative part of our work occurs, have tended to swell the expenses to a larger proportion of the gross receipts than ever before.

There have been charged to expenses the following items:—

Depots at Freemansburg, Easton, Mahanoy City, and Hazleton	\$7,049 85
Shops at Hazleton, Weatherly, Delano, Packerton, and South	
Easton	45,336 35
New connection with the Bel. Del. R. R., and widening of rock	
cut at Easton	28,005 00
New offices and dwelling-houses	7,774 62
Telegraph line to Hazleton	1,130 49
New locomotives	92,625 01
New cars built, charged to repairs	55,500 00

In addition to the new cars built for increase of stock, a large number of coal cars have been built to replace those worn out, and that branch of our equipment is in better condition than at the corresponding period of last year.

There was charged to construction as follows:—

For new track L. V. R. R., 7½ miles	\$16,444 83
" Weatherly shops	3,047 52
" Delano shops	900 78
" new locomotives	37,204 60
" new coal cars, new passenger cars, &c.	111,651 58
" dwellings, Wilkesbarre branch	2,737 33
" dwellings, Weatherly	5,971 22
" dwellings, Delano	5,305 50
" new depot, Hazleton	1,787 86
" new car shop, Hazleton	20 25
" Water tanks, Hazleton division	745 93
" half of new depot at Bethlehem	10,781 05
" Reservoir, Sugar Notch	375 35
" South Easton shop	1,520 84
" Easton depot	4,857 75
" new track L. and M. division and railroad iron	41,884 91
" railroad spikes	277 50
" new dwellings, Hazleton	35,000 00
" railroad iron	1,490 09
" railroad sills	802 50
" railroad frogs	1,638 00
	<hr/>
	\$284,445 39

There are now in use, including all divisions of the road, 72.43 miles of double track and 127.02 miles of single track, in addition to which there are 14.42 miles of double track laid, but used as sidings, and 96.34 miles of sidings; making the total length of track laid 382.64 miles, an increase from last year of 72.89 miles, of which 65.40 miles were obtained at the mergers with the Hazleton and the Luzerne and Lehigh railroads, and 7.49 miles were laid during the year.

There are also on the main line 8.39 miles of grading completed and ready for track. The following materials were used for repairs and construction:—

REPAIRS.

	Switch Frames.	Frogs.	Cross ties.	Iron rails.	Chairs.	Kegs of spikes.
Eastern Division	40	72	32,805	5,674	2,193	173
Wyoming Division	1	10	2,273	430	.....	18
Hazleton Division	10	8	8,000	637	979	39
Beaver Meadow Division . . . . .	...	10	16,383	3,254	1,188	93
Mahanoy Division	3	16	12,571	921	875	59
Totals	54	116	72,032	10,916	5,235	382

CONSTRUCTION.

Eastern Division . . . .	...	...	7,800	1,144	1,144	114
Wyoming Division	13	13	4,080	598	594	60
Hazleton Division	12	18	3,998	394	406	37
Beaver Meadow Division . .	5	5	621	130	131	8
Mahanoy Division	1	1	960	279	281	19
Totals	31	37	17,459	2,545	2,556	238

In July last, the Belvidere Delaware R. R. Co. having completed a connection with our road at Phillipsburg, we commenced widening the Easton cut for a more direct line to the new Delaware bridge, and at the same time filling up the lower track through the cut, now rendered useless. The grading and filling are nearly completed and the masonry for the road-crossing at the west end of the Delaware bridge, on the line of the old bridge, is in progress. This widening will give us additional standing room at Easton, which our increased business there imperatively demands.

The filling of the trestle-work across the mouth of Hickory Run is nearly completed and will be finished during the coming winter.

The filling of the long trestle-work above White Haven, spoken of in last report, should be commenced during the coming year.

A branch road, 1864 feet in length, has been constructed from our main track to the colliery of the New Jersey Coal Company.

On the first day of August last, this company purchased the railroad of the Spring Mountain Coal Company, from Leviston to Jeanesville, and about October 1st, grading was commenced for a short extension, connecting the same with our main line near Yorktown. The grading was also commenced at the same time of a short extension of our main track at Audenried, connecting it with the mines of the German Pennsylvania Coal Company. The grading of both these branches is now in progress with a prospect of speedy completion. The object to be accomplished by this purchase and the building of these two extensions, is the connecting of all

the collieries on the Beaver Meadow branch with one main line, instead of three as heretofore, thereby decreasing the expense of operating.

On November 2d, 1868, the road of the Pennsylvania and New York Canal and Railroad Company was opened for business from the crossing of the Lackawanna and Bloomsburg Railroad to within one mile of Tunkhannock, a distance of 30.52 miles from its junction with the Lehigh Valley Railroad at Northampton Street, Wilkesbarre. This portion of that road has been operated by us in connection with our own road, and our passenger and freight trains have been run through to and from Tunkhannock. The following is a statement of the new work done on this portion of the road of the Pennsylvania and New York Canal and Railroad Company during the year:—

An arch has been built under the track at the store of the Baltimore Coal Company.

A branch road has been laid to the colliery of the Mineral Spring Coal Company, 5572 feet in length, the grading having been done by the owners of the colliery. Connecting tracks have also been laid to the colliery of the Wyoming Coal and Transportation Company, 2125 feet in length, and to the colliery of H. B. Hillman & Son, 1069 feet in length.

The track through Pittston, purchased from the Lackawanna and Bloomsburg Railroad Company, has been entirely relaid, the grades modified, and the capacity of that part of the road much increased thereby. The old trestle-works at Pittston have been filled and a substantial bridge erected at the "Big Basin" for passage of boats.

The telegraph line has been extended to Tunkhannock.

The following new buildings have been erected:—

At Falling Spring, Water Station . . .	12	by	16	feet.
" Roberts' Run, " " . . .	12	"	16	"
" McKune's Passenger and Freight Depot . . .	16	"	30	"
" Tunkhannock, Temporary " " . . .	18	"	64	"
" " Engine House . . .	32	"	128	"
" various points, four dwelling-houses for trackmen.				

A tract of about 14 acres of land has been presented to the Company at Wilkesbarre, on condition that shops shall be

erected thereon. The plans are now being matured for said shops for the repairs of locomotives and cars, in accordance with the suggestion made and adopted in last report.

On June 1st, 1868, by a merger of the stock of the Hazleton Railroad Company, and soon thereafter by a similar merger of the stock of the Lehigh Luzerne Railroad Company, this Company came into possession of said roads, with all their rights, franchises and property. These two roads having been operated by A. Pardee & Co., lessees, we subsequently purchased from them the rolling stock then in use upon said roads. By these two mergers and by purchase of rolling stock and other property from the lessees, there inured to this Company all the tracks of those two roads and tracks under the breakers as follows:—

Single track	. . . . .	30.85 miles.
Double track	. . . . .	7.42 "
Sidings	. . . . .	19.71 "

Making total length of tracks 65.40 miles; also, about 1800 acres of valuable coal land with improvements thereon, capable of producing a large amount of coal annually, and which has produced 106,980 tons since June 1st, which land is under lease to A. Pardee & Co., who pay this Company an annual rental per ton for the coal mined therefrom. Also, the unsold portions of the town plot of Hazleton, together with all the houses, buildings and fixtures belonging to the two railroad Companies, and those belonging to the lessees which pertained to the working of the roads, including a stone engine-house with stalls for twenty-one engines, and a complete set of shops of stone and brick of a substantial character, well furnished with tools, machinery and facilities for building and repairing engines, cars and machinery for the mines and collieries of the region, most of which rely mainly upon these shops for such work; also, a large amount of iron, timber, and other materials on hand, and all the rolling stock belonging to both these roads and to the lessees; inventoried as follows:—

17 locomotives.	1 tool car.
1 new locomotive, nearly finished.	615 5-ton coal cars.
1 passenger car.	186 6-ton coal cars.
1 baggage car.	451 10-ton coal cars.
6 house cars.	5 road trucks.
13 eight-wheel platform cars.	2 snow plows.
2 four-wheel platform cars.	

Since the merger, our telegraph line has been extended to Hazleton.

Steel Rails.

I have seen no reason to change my opinion of the value of steel rails as compared with iron; another year's wear has made no perceptible impression upon the 200 tons, the first of which were laid in May, 1864, none of which have broken or given out since last report. These rails have had a severe test, being in those places in the track where they are subject to the greatest wear, and being laid with a chair which is much inferior to the most approved joint now in use. A portion of these rails are of Bessemer steel, made by John Brown & Co., and a portion are of cast steel, made by Chas. Cammell & Co. We can discern no difference between the two lots; both have given satisfactory results, and there being no longer any possible doubt as to the superiority of steel over iron, in economy as in every other respect, we have contracted for an additional quantity as follows:—

26 tons German puddled steel-headed rails with iron base and neck. These we received and laid in main track at Easton in the month of September, 1868.

Also, 81 tons of Bessemer from John Brown & Co. These were received in July; a part were laid on the heavy grade above Weatherly in August, and a part at Easton in September.

Also, 1000 tons of Bessemer from John Brown & Co., and 200 tons from the Barrow Hematite Steel Company; none of these have yet been received.

Also, 25 tons of steel-headed rails from Waterman and Beaver, which are well recommended to us by parties who have used them.

The advantage of steel-headed rails with iron base and neck

will be their comparative cheapness. If the firm from whom we have contracted this last mentioned lot, and the Bethlehem and other iron companies who are preparing to roll this class of rails, are successful in the undertaking, it will not be long before we shall be able to supply ourselves from the manufacturers of our own country, instead of depending upon a foreign market as heretofore. We have had in use in the main track in front of our office at Bethlehem, since August, 1867, a single steel-headed rail with iron base and neck, made by the Bethlehem Iron Company, which shows very little wear while the iron rails alongside of it have been renewed four times.

Steel Tyre.

The experience of the past year has confirmed our favorable opinion of steel tyres. There were on the road, at date of last report, 57 locomotives furnished with steel tyres. This number has been increased during the year as follows:—

Iron tyre replaced by steel on 7 engines.

Steel tyre put on 9 new engines, built and purchased during the year.

Steel tyre received with 3 new engines from Hazleton Railroad.

The use of steel tyres being at first something of a novelty and experiment, we were led to purchase from a number of different makers, with a view of testing and obtaining the best; and although in one or two instances they have not done as well as we could wish, yet none of those of reliable manufacture have failed, and the result in general has been very satisfactory.

The steel tyres of engine Easton No. 25, put on in December, 1863, have made 106,185 miles, and are still good, though they have been turned off twice.

Steel Fire Boxes.

We had, at date of last report, 14 engines with steel fire-boxes. All have given good satisfaction during the year, except those of engines 50 and 51, which were not of good quality and have given us continual trouble. We have now

in use 29 fire-boxes of steel. The first one, put in engine Packerton in January, 1862, is still good. All the engines contracted for, or which we build ourselves, are furnished with steel fire-boxes and tyre.

Every effort has been made to keep up the efficiency of the road, the machinery, and the rolling stock, and to move satisfactorily the increased tonnage, which, during the last three months of the year, has been far in excess of any previous time, and amounted to 682,868 tons.

The number of coal cars running over our line during this period was the same as it was eighteen months ago; for although our own cars have increased in number, yet others have been withdrawn from the trade in equal number. The increase in tonnage, as shown by the number of tons hauled one mile, is (under these circumstances) perhaps as great as could be expected.

Equipment.

Our equipment has been increased and decreased during the year as follows:—

Engines.

Purchased in 1868	9	
Built by L. V. R. R. Co.	5	
Received at merger with Hazleton R. R.	17	
	<hr/>	31
Less one sold to Bethlehem Iron Co.	1	
Less Nos. 6, 8, and 24, sent to Pa. & N. Y. C. & R. R. Co.	3	
	<hr/>	4
Increase		27

Passenger Cars.

Purchased in 1868	5	
Received at merger with Hazleton R. R.	1	
One not before reported	1	
	<hr/>	7
Less No. 13, destroyed on L. & B. R. R.	1	
Less Nos. 5 and 21, sent to Pa. & N. Y. C. & R. R. Co.	2	
	<hr/>	3
Increase		4

Baggage and Express Cars.

Built in 1868, No. 9	1
Received at merger with Hazleton R. R., No. 11	1
	<hr/>
Less No. 1, sent to Pa. & N. Y. C. & R. R. Co.	1
	<hr/>
Increase	1

House Cars.

Not previously reported	4
Received at merger with Hazleton R. R.	6
	<hr/>
Less Nos. 348, 352, 354, 356, 380, and 392, sent to Pa. & N. Y. C. & R. R. Co.	6
	<hr/>
Increase	4

Eight-Wheeled Platform Cars.

Built at Packerton	54
Received at merger with Hazleton R. R.	13
Not previously reported	11
	<hr/>
Less Nos. 191, 201, 212, 266, 271, 279, and 281, sent to Pa. & N. Y. C. & R. R. Co.	7
	<hr/>
Increase	71

Four-Wheeled Platform Cars.

Not previously reported	10
Received at merger with Hazleton R. R.	2
	<hr/>
Increase	12

Gravel Cars.

Nos. 1, 2, 3, 6, 9, 10, 13, 30, 33, 38, 39, and 40, sent to Pa. & N. Y. C. & R. R. Co.	Decrease	12
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Wreck and Tool Cars.

Not previously reported	5
Received at merger with Hazleton R. R.	1
	<hr/>
Increase	6

Coal Cars.

Built at Packerton	353
Built at Hazleton	59
Received at merger with Hazleton R. R.	1703
	<hr/>
Less P. L. & Co. cars not found	11
	<hr/>
Increase	2104

Our equipment is now as follows:—

Engines of all classes	117
Passenger cars (17 first-class and five second-class)	22
Baggage and express cars	11
House cars	6
Eight-wheeled platform cars	317
Four-wheeled platform cars	12
Gravel cars	40
Wreck and tool cars	6
Lime cars	20
Coal cars (rated as four-wheeled cars)	9084

The number of engines given above includes several which are not relied on for general service, and four entirely out of service (Nos. 1, 17, Colorado and Mountaineer).

Locomotives.

We have completed during the year, at our own shops, two passenger and three freight engines, and have in process of construction at Hazleton and Delano shops, two (2) engines which will be completed and in use early in the year. We have also under contract with M. Baird & Co., six (6), and with the Mason Manufacturing Company, two (2)—all heavy engines. We shall want during the year at least six (6) new heavy engines (of the ten-wheel or "consolidation" pattern) in addition to those which we shall be able to build in our own shops; also, two (2) new passenger engines, to accommodate our increasing trade. These should all be ordered without delay, to ensure their delivery in time for the spring and summer trade.

Passenger Cars.

Our passenger equipment is limited; the business now doing requires at least four (4) additional first-class cars; these should be purchased the coming winter.

Slatington Branch.

The limited amount of ground owned or attainable by us at Slatington, and the annual increase of business at that station, together with the large amount of slate quarried on Trout Creek, induced me to look with favor upon the project of building a branch road up the stream, of about four miles

in length; the road has been located and should be built as soon as spring opens, as it will not only relieve us from the crowded condition of our depot grounds, but will tend to develop to a much greater extent the large and valuable slate deposits, and secure to our road the entire product of that region.

Black Creek Extension.

Surveys and location have been made for the extension of our Hazleton branch down the valley of Black Creek to Roberts' Run, a distance of about $13\frac{1}{2}$ miles; the line as located will occupy about one mile of the Cranberry Railroad, then following down Cranberry Creek about three miles to its intersection with the valley of Big Black Creek, thence down the last-named stream 2.8 miles the line crosses to the north side of the creek and passes the proposed works of the Central Coal Company $7\frac{1}{4}$ miles from Hazleton. At $10\frac{1}{2}$ miles the line again crosses to the south and follows the creek on that side to the valley of Roberts' Run (this latter being a continuation of the Coal Basin), up which the line has been extended to the openings of the West Buck Mountain Coal Company, a distance of 13.32 miles from Hazleton and 82.5 miles from Phillipsburg. Although but two coal operations are mentioned above, other tracks have coal proved upon them, and, of the whole distance, not more than two miles is supposed to be outside of the coal. In the location, cheapness of construction has been kept in view; the tangents and curves are of about equal extent; the minimum curvature being 2° , and the maximum (of which there is but one) 12° . The whole fall is 579 feet, or an average of 47 feet per mile. The grades adopted vary from 31.68 to 58 feet per mile. A uniform grade is not attainable without incurring heavily increased expense and elevating the line at points much above the proper location of the breakers. The estimated cost of this extension is about \$20,000 per mile. In addition to the coal developed by this branch, it will, in connection with the Danville, Hazleton and Wilkesbarre Railroad, which is in process of construction, form a short line from the Lehigh to the Susquehanna.

Bridges.

A double-track trussed-girder bridge (No. 2) has been built over the public road at the west end of Delaware bridge on the line of the new bridge.

A double-track iron bridge has been built to replace the old wooden bridge (No. 11), between Catasaqua and Hoken-dauqua.

On the 25th of July last, a heavy freshet, unprecedented within the memory of man, occurred on both sides of the Blue Mountains, which washed the banks and culverts badly between Slatington and Parryville, carrying away entirely the bridge of three tracks, 75 feet span, over Trout Creek at Slatington, and the western abutment of the same. This abutment has been rebuilt and an iron bridge is in progress. The tracks are now supported on trestle work. This bridge was never considered in danger from water, and in the flood of 1862 it stood 6 feet above the highest. Yet it has been deemed prudent in re-building to enlarge the span 15 feet, making it 90 feet, and also to raise the bridge one foot higher than before. This has been provided for as a precaution against what may possibly happen in the future. This new abutment has been continued as a vertical wall along the whole creek front of our property, so that it can be filled and made available.

The stone viaduct across Mahoning Creek has not yet been commenced, but arrangements have been made for erecting it during the coming season. Two abutments and a truss-girder bridge have been built at the mouth of Hickory Run. A stone arch is in progress to replace the bridge over Hay's Creek, which was considered unsafe. A stone arch culvert of 30 feet span and 135 feet in length has been built at Switch-Back, with the intention of filling up the old bridge. This filling should be done during the coming season.

Buildings.

At Easton, the new passenger depot, 28 by 126 feet, has been completed. At South Easton, a new paint shop built, 40 by 125 feet, two stories; also a new water station commenced,

with capacity of 50,000 gallons. At Freemansburg, a new brick depot for passengers and freight, 19 by 56 feet, is nearly completed. The following new buildings are erected :—

New water station at Hokendauqua, with capacity of 11,000 gallons, and new water station commenced at Rockdale, with capacity of 37,000 gallons.

New watch-houses built, as follows :—

- 1 at west end of Delaware bridge.
- 1 at Phillipsburg.
- 2 near Easton depot.
- 1 above Allentown Furnace.

A new brick smith-shop at Packerton, 41 by 222 feet, in place of the old frame shop, has been commenced; also a new shop office of brick, 22 by 32 feet. At Tannery Station, new depot built for passengers and freight, 20 by 30 feet. A frame addition to Packerton Hotel has been built, 18 by 33 feet.

At Bridgeport, new tool house . . .	12 by 16 feet.
" White Haven, new tool house . . .	14 " 18 "
" Nescopee, " " " " . . .	12 " 16 "
" Fairview, water tank . . .	12 " 16 "
" Sugar Notch, passenger and freight depot	18 " 32 "
" Plymouth Junction, office . . .	12 " 16 "
" Wilkesbarre, water tank . . .	12 " 16 "
" various places on Wyoming Division, five dwelling-houses.	

Weatherly Shops.

The new shops at Weatherly are nearly completed and will soon be ready for use. A water-pipe, 44 to 30 inches in diameter, has been laid from the head-race of the old shop to the new shop, a distance of 1200 feet, and a turbine wheel has been put in, to furnish the power for this shop. Water was adopted in preference to steam, because more economical in use, always ready at a moment's notice, and free from danger of fire. Four double dwelling-houses have been built at Weatherly, each 32 by 28 feet. There have been built at Delano, two double dwellings, each 30 by 34 feet, with kitchens 12 by 20 feet. Oil house 16 by 30 feet. Addition to carpenter shop 25 by 95 feet, and addition to smith-shop 38 by 50 feet, all framed. At Mahanoy City, a new framed passen-

ger and freight depot, 20 by 76 feet. At Stewart's, a new water station, with capacity of 11,000 gallons. At the lumber yard on Hazleton Branch, a new water station, with capacity of 11,000 gallons. At Hazleton, a new shop office, framed, 24 by 42 feet, and a new framed depot for passengers and freight, 20 by 76 feet.

The condition of our road throughout is better than at corresponding time last year. No accidents or delays have occurred from defective track, and it is a subject of congratulation that no passenger in our regular trains has been injured since date of last report.

Pennsylvania and New York Canal and Railroad Company.

Very little work was done during the winter on the extension up the North Branch; but during the spring and summer the track was extended to Tunkhannock, and considerable progress made in the construction of the line between the last-named point and Towanda, though the great scarcity of labor last year did not permit driving the work as rapidly as I could desire. The masonry at Tunkhannock is completed and the bridge framed; the heavy embankment on the south side of the creek is well advanced, and on the north side is completed; the grading from thence to Horse Race Dam will be ready to receive the track as early in the spring as we can lay it; from thence to Meshoppen, 4 miles, the track is now laid; the masonry for the bridge across the canal at Meshoppen is completed, and the superstructure partly framed; the bridge over the creek is finished; the masonry for Skinner's Eddy and Lacyville bridges is completed. At Wyalusing the masonry is done, the timber for superstructure is framed, and the trestling across the flat is up. At Wysox Creek the masonry has not been started, but will be in time not to delay the completion of the line. At Towanda Bridge both abutments and four piers are nearly completed, and the remaining three piers are well under way; the timber and iron work for superstructure have been provided and it is expected to complete the entire structure by July 1st, 1869. By the opening of spring the heaviest work to be done to complete the line will be the laying of about 49 miles of track. 20 miles of

the upper end of the road, extending from Towanda to a connection with the Erie Railway, were opened early in the year, though it was not until June that the track was extended through the borough of Towanda, and a connection made with the Barclay Railroad; since which time there has been received from the Towanda Coal Company, and delivered to the Erie Railway Company at Waverly, 44,296½ tons of bituminous coal, the Towanda Coal Company furnishing the engines and cars for transportation. The receipts for this portion of the road have fully met my expectations and are as follows:—

From freight, passengers, mail, and express, 11 mos.	\$42,294	42
“ tolls on coal, 5½ months	13,560	18
Total	\$55,854	60
Expenses of conducting business	22,583	37
Net profits	\$33,271	23

Ground has been purchased and pockets erected sufficient for the transfer of say 100,000 tons of coal, at Waverly; but it is expected that the necessity for this transfer will be dispensed with, as a contract between our Company and the Erie Railway Company provides for the laying of a third rail from Waverly to Buffalo, so that coal cars loaded in Wyoming Valley may be dumped on the shore of the lake without break of bulk. It will be necessary to make provision for the equipment to meet the requirements of this trade. The Southern Central Railroad of New York is progressing favorably, and I understand contracts are about being made to purchase the iron for the track between Owego and Auburn.

The anthracite coal trade of 1858 was 6,759,369 tons. The present year will develop the fact that this has been doubled within the past decade; if the same rate of increase is maintained in the future, 1878 will see the anthracite fields worked to their full capacity of production. In the interval, an unwise strife for tonnage, or a disposition for over production, which we would very much regret to see, may have the effect of reducing the dividends of dividend-paying transporting and coal companies; but the time is not remote when

every properly invested interest in the mining and transporting of coal will receive remunerative compensation for the labor and capital employed.

The carefully prepared map which accompanies this, will serve to show the extent of our road and its ramifications into and through the Schuylkill, Lehigh and Wyoming coal fields, and a few figures will illustrate the rapid strides made in the mileage of track, in tonnage transported, and in dollars earned, as well as develop the fact that, while large expenditures have been necessary to enable us to maintain our position fully in the list of transporting companies, they have been so made as to yield a satisfactory return for the investment of stockholders (the dividends during the period of comparison having averaged over ten per cent. per annum); and they show the proportion of receipts to capital invested, in 1868, to be much more favorable than in 1858:—

	1868.	1858.	Increase per cent.
Capital and debt	\$20,350,000 00	\$3,550,000 00	473 $\frac{2}{10}$
Miles of track laid, including branches and sidings	382.6	58.5	554
Tons of coal transported one mile	153,895,705	16,704,486	821 $\frac{2}{10}$
Receipts from transportation of coal	\$3,108,296 49	\$338,800 05	817 $\frac{4}{10}$
Receipts from freight and pass- engers	\$1,162,353 21	\$103,245 30	1025 $\frac{8}{10}$
Total receipts	\$4,270,649 70	\$442,045 35	866 $\frac{1}{10}$

Our relations with all connecting roads have been harmonious and pleasant, and I trust may continue to be so.

In conclusion, permit me again to bear willing testimony to the zeal and fidelity with which the officers and employees generally have devoted themselves to the interests of the Company.

Very respectfully yours,

ROBT H. SAYRE,

General Superintendent and Chief Engineer.

